



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,152	06/04/2001	John M. Verbil	1847 USW 0627 PUS	6560
22193	7590	06/30/2005	EXAMINER	
QWEST COMMUNICATIONS INTERNATIONAL INC LAW DEPT INTELLECTUAL PROPERTY GROUP 1801 CALIFORNIA STREET, SUITE 3800 DENVER, CO 80202			AL AUBAIDI, RASHA S	
			ART UNIT	PAPER NUMBER
			2642	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/874,152

**Applicant(s)**

VERBIL ET AL

**Examiner**

Rasha S. AL-Aubaidi

**Art Unit**

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 4-28 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Applicant's amendment filed on April 18, 2005 has been entered. Claims 1, 6, 21, have been amended. No further claims have been canceled. No claims have been added. Claims 1 and 4-28 are still pending in this application, with claims 1, 11, 21, and 28 being independent.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 11, 21, and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of Marks et al U.S. Patent No. 5,844,896. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed invention in the instant application is fully disclosed in patent number 5,844,896 and it is broader than the claimed invention in the patent. No new invention, or new improvement is being claimed in the instant application. Applicant is now attempting to claim broadly that which had

Art Unit: 2642

been previously described in more detail in the claims of the patent (In re Van Ornum, 214 USPQ 761 CCPA 1982).

Furthermore, there is no apparent reason why Applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent.

***Claim Rejections - 35 USC § 103***

4. Claims 1, 4-10, and 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisser, Jr. et al. (US PAT # 5,600,710) in view of Knoerle et al (US PAT # 6,597,780) and further in view of Watts (US PAT # 5,668,861).

Regarding claim 1, Weisser teaches a method of queuing calls to a subscriber of queuing services (see col. 9, lines 12-15) accessed through a subscriber line, the method comprising: provisioning Call Forward on Busy Line on the subscriber line (this reads on determining if the called line is busy "Advertise-on-busy", see col. 9, lines 13-14) to permit detecting a call to the subscriber line at a local switch connected to the subscriber line (the local switch reads SSP 15 and SSP 15', see Fig. 3 and col. 10, lines 8-22); if the subscriber line is busy, queuing the call to the subscriber (see col. 9, lines 12-15); determining that the subscriber line is determined to be not busy, connecting the call to the subscriber with the subscriber line (see col. 9, lines 4-6).

While Weisser utilizes an intelligent peripheral 39 (Fig. 3) and teaches that the queued call is connected to the intelligent peripheral (see abstract), Weisser does not specifically teach queuing the call in the intelligent peripheral (IP).

However, Knoerle teaches in an Advanced Intelligent Network (AIN), the service node 300 (see Fig. 4) is capable of placing calls on hold (see col. 8, lines 27-29 and lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of holding or placing calls in queues within the service node/IP itself, as taught by Knoerle, into the Weisser system in order to minimize the load on the SCP and free the main network resources. Generally, IPs have been used to perform network functionalities in order to decrease the load on the network elements, such as SCPs.

On one hand, the combination of Weisser in view of Knoerle did not specifically teach the claimed limitation of "dialing the subscriber line from the intelligent peripheral".

On the other hand, examiner now would like to introduce Watts reference, which teaches a telecommunication system with a notification hold feature. Watts discloses if a called telecommunications device 18 disconnects, then intelligent peripheral 40 will

initiates a call to the calling communications device 12 (see col. 3, lines 66-67, col. 4, lines 1-7 and Fig. 1).

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of having the intelligent peripheral call the calling party number (calling party number may read on the subscriber) and connect the call, as taught by Watts into the combination of Weisser in view of Knoerle in order to provide speed and convenience to the calling party, and enhance the efficiency of the system.

Claims 21 and 28 are rejected for the same reasons as discussed above with respect to claims 1. Also, regarding claim 21, having at least one available queue slot is inherent in any queuing process. In order to place a call in queue a free slot must be available.

Regarding claim 4, forwarding the subscriber line call to a Direct Inward Dial telephone number on the intelligent peripheral reads on using a PBX as the IP. PBXs have been used for so many years.

Claim 5 recites "determining that the subscriber line is not busy comprises setting a Next Event List at the subscriber local switch". This may read on connecting the caller to the called destination).

Regarding claim 6, the limitation of having the local switch call the intelligent peripheral when the subscriber line is found to be busy in response to a call to the subscriber line reads on the well known Forward on Busy feature. Calls in the queue will be directed to the called destination by monitoring the called line when it becomes idle (see col. 9, lines 43-53).

Claims 7 and 25 recite "determining that the call to the subscriber has been queued for a determined amount of time; requesting that a caller placing the call to the subscriber perform an action to remain in queue; and if the caller does not perform the requested action, dequeuing the call". This may read on the service node 300 (in Knoerle) informing the calling party whether he/she wants to remain on the line or not, if so he/she has to press 1, for example, otherwise calls will be terminated. Having the subscriber enter an action or press a number in order to stay connected is also an obvious and well-known feature in the art.

Claims 8 and 26 are rejected for the same reasons as discussed above with respect to claim 1. Also, generating queue utilization statistics based on the collected queue utilization information reads on the number of calls entered the queue and completing these calls based on the priority of the call and the sequence of the call in the queue, see Weisser, col. 9, lines 49-67).

Regarding claims 9 and 27, Weisser teaches an IP or a service node may play different recorded messages to calling subscribers (see col. 10, lines 57-61). Therefore, having IP or the service node announcing the time, how long the call has been entered in the queue, and the number of the call in the queue list would have been obvious and well known.

Claim 10 recites "the intelligent peripheral is a switchless intelligent peripheral". The use of switchless queuing is well known in the art.

Claims 22-23 recite "the service control point instructing the intelligent peripheral to dial the number of the messaging system and to bridge the received subscriber call to the messaging system call if the service control point determines no queue slots are available. This simply reads on the scenario of having the IP or the service node connecting the call to the mailbox system in the event of not queuing the call. The feature of connecting the caller to a mailbox in order for him/her to leave a message to the called party is an old and well-known feature in the art.

Claim 24 recites "playing a message from the intelligent peripheral to the forwarded call when queuing the forwarded call (this basically reads on the IP playing announcement when the call placed in a queue, see also, col. 10, lines 24-28 in Weisser).



***Claim Rejections - 35 USC § 103***

5. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisser, Jr. et al. (US PAT # 5,600,710) in view of Knoerle et al (US PAT # 6,597,780).

Regarding claim 11, Weisser teaches a method of queuing calls to a subscriber of queuing services (see col. 9, lines 12-15) accessed through a subscriber line, the method comprising: provisioning Call Forward on Busy Line on the subscriber line (this reads on determining if the called line is busy "Advertise-on-busy", see col. 9, lines 13-14) to permit detecting a call to the subscriber line at a local switch connected to the subscriber line (the local switch reads SSP 15 and SSP 15', see Fig. 3 and col. 10, lines 8-22); if the subscriber line is busy queuing the call to the subscriber (see col. 9, lines 12-15); determining that the subscriber line is determined to be not busy, connecting the call to the subscriber with the subscriber line (see col. 9, lines 4-6).

While Weisser utilizes an intelligent peripheral 39 (Fig. 3) and teaches that the queued call is connected to the intelligent peripheral (see abstract), Weisser does not specifically teach queuing the call in the intelligent peripheral (IP).

However, Knoerle teaches in an Advanced Intelligent Network (AIN) the service node 300 (see Fig. 4) is capable of placing calls on hold (see col. 8, lines 27-29 and lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of holding or placing calls in queues within the service node/IP itself, as taught by Knoerle, into the Weisser system in order to minimize the load on the SCP and free the network resources. Generally, IPs have been used to perform network functionalities in order to decrease the load on the network elements, such as SCPs.

Claim 12 recites "the service control point determining if queue slots are available in the intelligent peripheral". This is inherent in any queuing process.

Claims 13-14 recite "the service control point instructing the intelligent peripheral to dial the number of the messaging system and to bridge the received subscriber call to the messaging system call if the service control point determines no queue slots are available. This simply reads on the scenario of having the IP or the service node connecting the call to the mailbox system in the event of not queuing the call. The feature of connecting the caller to a mailbox in order for him/her to leave a message to the called party is an old and well-known feature in the art.

Claims 15 and 19 are rejected for the same reasons as discussed above with respect to claims 9 and 27.

Regarding claim 16, Weisser teaches the possibility of choosing a service node (this basically means the reference teaches having more than one IP or service node, see col. 9, lines 14-17 and col. 10, lines 26-28), intelligent peripheral implementing at least one call queue (each IP implementing at least one call queue), each call queue associated with one of a plurality of subscribers (this is obvious); at least one service control point (reads on SCP 26 in Fig.3), each intelligent peripheral in communication with one service control point collecting information about each queued call (this reads on the service node 39 collecting data and information from the database 26, see Fig. 3, see also, col. 10, lines 55-57). Weisser does not exactly teach data server in communication with the at least one service control point, the data server aggregating queue utilization data for each subscriber. However, it would have been obvious to have this data server accumulating queue utilization data for each subscriber to be used, for example, in billing.

Claims 17-18 are rejected for the same reasons as discussed above with respect to claim 16. The data distributor may read for example, on SMS 37, see col. 4, lines 49-59, in Weisser.

Claim 20 recites "the intelligent peripheral is a switchless intelligent peripheral". The use of switchless queuing is well known in the art.

6. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisser, Jr. et al. in view of Knoerle and further in view of Watts, and further in view of Andrews et al (US PAT # 5,271,058).

The combination of Weisser, Knoerle and watts alone or in combination does not specifically teach the use of a switchless intelligent peripheral.

However, Andrews teaches a switchless automatic call distributor that is able to perform certain functions such call processing, call queuing, ... etc, (see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of switchless ACD, as taught by Andrews, into the combination of Weisser, Knoerle, and Watts system in order to have the network performs the functionalities without having to use a switch as described in Andrews.

### ***Response to Arguments***

7. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

The claimed invention is basically a combination of two old and well known features, namely; the "camp on busy" feature and the use of an IP in an AIN. The Camp on busy feature is old and it has been assigned its own subclass in the PTO for many years. Class 379, subclass 209.01 specifically refers to the "Camp on busy" features which means hold in a queue if the called destination is busy until the destination becomes available. For many years callers wait in a queue ("hold") until the destination becomes idle. Also, the use of an IP to perform some AIN functionality is old and well known.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Elfe et al (US PAT # 6,445,782) teaches that the functionality in an IN architecture can often optionally be provided from a different places in the architecture (see col. 7, lines 18-19). This basically means even though services are normally provided either by the SCP or the SSP it is still possible that these services can be provided by an intelligent peripheral or a service node. Thus, having the intelligent peripheral performing the switch functionality (e.g., placing calls in queue, dialing the subscriber line, ...etc) is obvious and well known in the art.

Art Unit: 2642

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rasha S AL-Aubaidi whose telephone number is (571) 272-7481. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar, can be reached on (571) 272-7488.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2642

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Examiner**  
**Rasha S. Al-Aubaidi**  
**Art Unit 2642**  
**06/17/2005**



**AHMAD MATAR**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**